



OSWER Innovations Pilot

Environmental Results Program for Underground Storage Tank Systems

In December 2001, the Office of Solid Waste and Emergency Response (OSWER) initiated a series of innovative pilots to test new ideas and strategies for environmental and public health protection to make OSWER programs more efficient, effective, and user-friendly. A small amount of money is set aside to fund creative proposals testing approaches to waste minimization, energy recovery, recycling, and land revitalization that may be replicated across various sectors, industries, communities, and regions. We hope these pilots will pave the way for programmatic and policy recommendations by demonstrating the environmental and economic benefits of creative, innovative approaches to the difficult environmental challenges we face today.

BACKGROUND

Groundwater is critical to maintaining a high quality of life in New England. Two thirds of Rhode Island communities rely in whole or significantly upon groundwater for their drinking water supplies. Over 90% of groundwater in the state is potable without treatment. Unfortunately, contamination incidents in the state have shown that this resource is vulnerable to contamination. The leading cause of new groundwater contamination is the release of petroleum products from underground storage tanks (USTs). Leaked petroleum products or other hazardous materials introduce known carcinogens into the environment, threatening human health. In addition, fugitive petroleum vapors infiltrate into basements and crawl spaces, posing a threat of fire and explosion. Methyl tertiary butyl ether (MTBE), a gasoline oxygenate additive used widely in New England to reduce air pollution, is a major problem. Its strong odor and taste can render water supplies unusable, and MTBE is a possible carcinogen.

While EPA's UST program in New England has been a great success, achieving some of the highest compliance rates in the country, the importance of achieving 100% compliance is critical. Rhode Island has a backlog of 295 required cleanups, and 26% of confirmed releases are not in "cleanup completed" status. A May 2001 report by the U.S. General Accounting Office (GAO) stated that 29% of regulated tanks were not being operated or maintained properly. Two recommendations made by GAO were more frequent physical tank inspections and training support for tank

owner/operators.

PILOT APPROACH

The State of Rhode Island Department of Environmental Management (RIDEM), in partnership the U.S. EPA Region 1, the University of Rhode Island Pollution Prevention Center, and sector stakeholders (petroleum industry, small businesses, Rural Development Council, Resource Conservation and Development Council, Rhode Island Conservation Districts, environmental groups, and local governments), will develop an Environmental Results Program (ERP) for underground storage tank systems. RIDEM has experience with ERPs through its development of an ERP program for the autobody sector. RIDEM believes the UST sector is an area where environmental performance can be enhanced by improving environmental awareness at facilities and by better measuring compliance.

Project development will follow the ERP Roadmap developed by the Massachusetts Department of Environmental Protection in conjunction with the User's Guide for Government Agencies, released March 2002. Several ERP approaches will be evaluated, including self certification, third-party certification, and certification by qualified vendors obtained through an open bid process. An ERP will be designed that meets the priorities of the sector and produces measurable results. Tasks to be performed include determining the universe of facilities, developing Environmental Business Practice Indicators (EBPI), and developing a methodology to assess sector conditions. A certification

workbook and checklist will be developed based on the EPA Generic Workbook and Federal Checklist required for federal facilities. Implementation of a training program for inspectors and certifiers will be an important program element. A minimum of biennial certification will be required consistent with a newly established state law.

For additional information, visit the EPA OSWER Innovations web site at: www.epa.gov/oswer/IWG.htm.

INNOVATION

The ERP encourages environmental stewardship on the part of small businesses by promoting their understanding of environmental impacts and their regulatory responsibilities and by biannual certification of participant compliance. Environmental performance is tracked and prompt correction of non-complying situations is required. Businesses may identify instances of noncompliance and correct them prior to reporting with no penalty. RIDEM already has developed an ERP for the autobody sector, and has identified the UST sector, with its well-defined universe of systems, as an excellent candidate for a new application of the ERP approach.

BENEFITS

RIDEM budget and staff constraints severely limit the state's ability to provide traditional regulatory enforcement and assistance to address the high rate of noncompliance in this sector. Careful measurement of compliance success through the ERP will ensure adequate resource protection and encourage continuing improvement. The ERP will combine elements of enforcement with education and technical assistance to allow regulators and the regulated community to work together to achieve improved environmental results. The ERP will provide a way for RIDEM to improve compliance with regulatory requirements, increase sector awareness of their environmental obligations, while freeing limited regulatory staff to target poor performers. In this time of reduced budgets, the need for a certification program with consistent measurable results is critical.

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